

Remarks

Claim 15 is amended.

Claims 1-7, 9, 12, 13, 15 and 17 are pending and are under consideration.

Claim 15 is amended to be more clear by inserting the term "component".

No new matter is added.

Claims 15 and 17 are rejected under 35 USC 112, second paragraph, for reasons of record.

The Examiner states that claim 15 is not clear.

In view of the present amendments, Applicants submit that the 35 USC 112, second paragraph rejections are addressed and are overcome.

Claims 1-7, 12 and 13 are rejected under 35 USC 103(a) as being unpatentable over DE 3903218 in view of Keller, et al., U.S. Pat. No. 5,574,082, JP 62-158737 and Fukui, et al., U.S. Pat. No. 5,100,930 and further in view of Laermer, et al., U.S. Pat. No. 5,308,549.

Claims 1-7, 9, 12, 13, 15 and 17 are rejected under 35 USC 103(a) as being unpatentable over DE '218 in view of Keller, JP '737 and Fukui and further in view of Tamura, U.S. Pat. No. 6,096,814 and Laermer, et al., U.S. Pat. No. 5,308,549.

The rejections are maintained for reasons of record and with further comments.

Keller, JP '737 and Fukui are cited as disclosing the use of sterically hindered phenol, phosphorus-containing antioxidant and α -tocopherol in polyolefins.

DE '218 is cited as disclosing a sterically hindered phenol, phosphorus-containing antioxidant and α -tocopherol in Examples 2 and 4 therein and stabilization of polyethylene at page 2, lines 65-66.

Tamura is cited as disclosing the stabilization of a polyolefin via the use of a stabilizer masterbatch.

Laermer teaches the stabilization of plastics with a mixture of one part tocopherol and 1.4 to 5 parts of a phosphorus-containing secondary antioxidant. Polyethylene is disclosed as a plastic substrate.

The Examiner states that it is obvious to arrive at the present invention from the combined disclosures of these references.

Applicants again reiterate the unexpected results of the second Thürmer Declaration, filed September 25, 2006. Applicants submit that inventive samples 3 and 4 are clearly and unexpectedly superior to prior art samples 1 and 2. Samples 1 and 2 contain the stabilizer mixtures of Examples 3 and 4 of DE '218.

It is noted that the mixture of 4,4'PQ, MPQ and P68 of DE ' 218 is equivalent to P-EPQ which is the mixture of phosphorus-containing antioxidants of present claim 15. See page 12 of the specification.

The inventive samples 3 and 4 are superior in regard to both retention of melt flow and degree of yellowing after multiple pass extrusion. The Declarant, an expert in the field, states so in the Declaration.

The Examiner states that the present claims do not require repeated extrusion processes. Applicants submit that melt flow and degree of yellowing after multiple pass extrusion are well known methods for determining the efficacy of stabilizers. For instance, see Table I of Laermer. Applicants submit that the patentability of the present claims is supported by the results of the Thürmer Declaration. The second paragraph of the present specification states that processing of polymers can have an adverse effect on molecular weight and physical properties. Stabilizers are necessary to minimize oxidation and discoloration.

Applicants note that present claims 15 and 17 are aimed more specifically at the invention as supported by the Thürmer Declaration.


The Examiner states that arriving at the present ratio of 10:1 (claim 17) sterically hindered phenol to α -tocopherol would be an obvious modification of the disclosure of DE '218. Applicants submit that the surprising results of the Thürmer Declaration are evidence that this is not an obvious modification.

In view of the present amendments, remarks and the Thürmer Declaration, Applicants submit that the 35 USC 112, second paragraph and 35 USC 103(a) rejections are addressed and are overcome.

The Examiner is kindly requested to reconsider and to withdraw the present rejections.

Applicants submit that the present claims are in now in condition for allowance and respectfully request that they be found allowable.

Respectfully submitted,



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